

University of Georgia

Potential herbicides for okra production.

Trial ID: Veg35-03
Location: Ponder farm

Study Dir.: Roger B. Batts
Investigator: Dr. David Monks

GENERAL TRIAL INFORMATION

Study Director: Roger B. Batts **Title:** IR-4
Affiliation: N. C. State University
Investigator: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: University of Georgia
Postal Code: 31794

TRIAL LOCATION

City: TyTy **Trial Status:** completed
State/Prov.: GA **Trial Reliability:** good
Postal Code: 31794 **Initiation Date:** Jun-06-03
Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	.		
2.	.		

Crop 1: Okra Okra **Variety:** Spineless Beauty
Planting Date: Jun-06-02 **Planting Method:** conventional
Rate: 3 foot **Depth:** 0.5 in
Row Spacing: 36 inch **Spacing Within Row:** 4 inch **Seed Bed:** bedded
Soil Temperature: 72 F **Soil Moisture:** moist **Emergence Date:** Jun-11-03

SITE AND DESIGN

Plot Width, Unit: 12 FT **Plot Length, Unit:** 20 FT **Reps:** 3
Site Type: research station
Tillage Type: conventional **Study Design:** RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 94 **% OM:** 1.2 **Texture:** sand
% Silt: 2 **pH:** 5.6 **Soil Name:** Tifton sandy loam
% Clay: 4 **CEC:** 0. **Fert. Level:** .

Overall Moisture Conditions: .

APPLICATION DESCRIPTION

	A	B	C
Application Date:	Jun-06-03	Jul-07-03	Jul-14-03
Time of Day:	9 am	10 am	8 AM
Application Method:	broadcast	broadcast	broadcast
Application Timing:	PRE	6 inch	layby
Applic. Placement:	on soil	overtop	directed
Air Temp., Unit:	82 F	84 F	81 F
% Relative Humidity:	65	61	61
Wind Velocity, Unit:	3 mph	1 mph	1 mph
Dew Presence (Y/N):	n	n	n
Soil Temp., Unit:	82 F	82 F	81 F
Soil Moisture:	moist	moist	moist
% Cloud Cover:	25	60	25

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	Okra PRE	Okra POST	Okra directed
Stage Scale:	.	V5-V6	V9
Height, Unit:	0. .	6 inch	12 inch

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WEED STAGE AT EACH APPLICATION

	A	B	C
	.		
Stage Scale:	.		
Density, Unit:	. .		
	.	.	
Stage Scale:	.	.	
Density, Unit:	

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	backpack	backpack	backpack
Operating Pressure:	22	22	19
Nozzle Type:	flat fan	flat fan	floodjet
Nozzle Size:	11002	11002	11002
Nozzle Spacing, Unit:	18 in	18 in	12 inch
Nozzles/Row:	2	2	3
Boom Length, Unit:	4.5 feet	4.5 feet	2 feet
Boom Height, Unit:	15 inch	15 inch	12 inch
Ground Speed, Unit:	3 mph	3 mph	3 mph
Carrier:	water	water	water
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA
Propellant:	CO2	CO2	CO2
Tank Mix (Y/N):	Y	Y	Y

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Potential herbicides for okra production.

Trial ID: Veg35-03
Location: Ponder farm

Study Dir.: Roger B. Batts
Investigator: Dr. David Monks

Weed Code			ABMES	ABMES	ABMES	ABMES	ABMES	ABMES	ABMES	ABMES
Crop Code			injury	injury	injury	injury	injury	Height	Height	Height
Rating Data Type			percent	percent	percent	percent	percent	CM	CM	CM
Rating Unit										
Rating Date			Jun-18-03	Jul-02-03	Jul-19-03	Jul-26-03	Aug-08-03	Jul-07-03	Jul-07-03	Jul-07-03
Trt-Eval Interval			342 DA-B	356 DA-B	375 DA-B	380 DA-B		361 DA-B	361 DA-B	361 DA-B
ARM Action Codes										
Trt No.	Treatment Name	Rate Unit	1	2	3	4	5	6	7	8
1	Treflan	1.5 pt/a	2.7	8.3	6.7	5.0	8.3	16.3	17.3	16.7
2	Treflan Sanda	1.5 pt/a 0.75 oz/a	21.7	66.7	39.3	27.7	22.3	12.3	9.7	11.0
3	Treflan Sanda NIS	1.5 pt/a 0.75 oz/a 0.25 % v/v	0.0	2.3	21.3	19.3	14.7	19.0	18.0	19.0
4	Treflan Cotton-Pro	1.5 pt/a 1.5 pt/a	0.0	8.3	3.3	0.0	1.7	20.0	20.7	21.7
5	Treflan Cotton-Pro NIS	1.5 pt/a 1.5 pt/a 0.25 % v/v	0.0	3.7	13.7	5.3	5.0	21.0	20.0	22.0
6	Treflan Meturon	1.5 pt/a 1 qt/a	73.3	96.7	86.0	88.3	88.3	4.0	8.0	6.7
7	Treflan Staple	1.5 pt/a 0.8 oz/a	13.7	51.7	14.0	18.3	11.0	14.0	13.7	9.7
8	Treflan Valor NIS	1.5 pt/a 1.5 oz/a 0.25 % v/v	0.0	3.7	29.3	29.3	15.0	18.7	18.7	19.3
9	Treflan Staple NIS	1.5 pt/a 1.0 oz/a 0.25 % v/v	0.0	9.0	21.7	24.3	19.3	13.7	15.0	13.7
10	Weed free check		0.0	0.0	0.0	0.0	0.0	22.3	24.3	21.7
LSD (P=.05)			6.35	9.05	13.12	10.91	10.47	6.67	7.31	5.61
Standard Deviation			3.70	5.27	7.65	6.36	6.11	3.89	4.26	3.27
CV			33.27	21.06	32.5	29.22	32.89	24.12	25.77	20.29
Bartlett's X2			2.793	11.174	12.113	10.602	8.177	5.92	5.007	4.423
P(Bartlett's X2)			0.425	0.192	0.146	0.101	0.416	0.656	0.834	0.881

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code			ABMES	ABMES	ABMES	ABMES	ABMES	ABMES	ABMES	AVERAGE	
Crop Code			Height	Height	Height	Height	Height	Height	Height	ABMES	
Rating Data Type			CM	CM	CM	CM	CM	CM	CM	Height	
Rating Unit			CM	CM	CM	CM	CM	CM	CM	CM	
Rating Date			Jul-07-03	Jul-07-03	Jul-07-03	Jul-07-03	Jul-07-03	Jul-07-03	Jul-07-03	Jul-07-03	
Trt-Eval Interval			361 DA-B	361 DA-B	361 DA-B	361 DA-B	361 DA-B	361 DA-B	361 DA-B	361 DA-B	
ARM Action Codes											
Trt No.	Treatment Name	Rate	Unit								
				9	10	11	12	13	14	15	16
1	Treflan	1.5	pt/a	17.0	19.3	17.7	15.3	19.3	19.7	21.3	18.0
2	Treflan	1.5	pt/a	9.0	8.7	10.3	10.3	7.3	11.0	12.0	10.2
	Sandea	0.75	oz/a								
3	Treflan	1.5	pt/a	19.0	19.7	17.0	18.3	16.3	17.3	17.3	18.1
	Sandea	0.75	oz/a								
	NIS	0.25	% v/v								
4	Treflan	1.5	pt/a	19.3	21.3	20.7	21.0	22.0	18.7	19.0	20.4
	Cotton-Pro	1.5	pt/a								
5	Treflan	1.5	pt/a	22.0	19.7	19.7	16.0	18.3	21.0	20.0	20.0
	Cotton-Pro	1.5	pt/a								
	NIS	0.25	% v/v								
6	Treflan	1.5	pt/a	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
	Meturon	1	qt/a								
7	Treflan	1.5	pt/a	13.7	10.3	9.7	9.3	10.0	12.0	8.0	11.0
	Staple	0.8	oz/a								
8	Treflan	1.5	pt/a	18.7	18.0	15.0	19.0	19.7	19.7	19.3	18.6
	Valor	1.5	oz/a								
	NIS	0.25	% v/v								
9	Treflan	1.5	pt/a	15.7	18.3	15.7	14.7	13.3	13.3	13.0	14.6
	Staple	1.0	oz/a								
	NIS	0.25	% v/v								
10	Weed free check			19.3	21.3	21.0	24.0	21.7	21.3	25.0	22.2
	LSD (P=.05)			6.80	4.45	4.30	4.80	4.83	5.34	4.51	3.96
	Standard Deviation			3.96	2.59	2.51	2.80	2.82	3.11	2.63	2.31
	CV			25.45	16.55	17.09	18.89	19.04	20.2	16.95	14.88
	Bartlett's X2			6.763	3.653	3.832	5.254	6.164	9.255	9.381	5.453
	P(Bartlett's X2)			0.662	0.887	0.872	0.73	0.629	0.321	0.311	0.793

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code			ABMES	ABMES	ABMES	ABMES	ABMES	ABMES	ABMES	ABMES
Crop Code			Height	Height	Height	Height	Height	Height	Height	Height
Rating Data Type			CM	CM	CM	CM	CM	CM	CM	CM
Rating Unit			CM	CM	CM	CM	CM	CM	CM	CM
Rating Date			Jul-28-03	Jul-28-03	Jul-28-03	Jul-28-03	Jul-28-03	Jul-28-03	Jul-28-03	Jul-28-03
Trt-Eval Interval			382 DA-B	382 DA-B	382 DA-B	382 DA-B	382 DA-B	382 DA-B	382 DA-B	382 DA-B
ARM Action Codes										
Trt No.	Treatment Name	Rate Unit	18	19	20	21	22	23	24	25
1	Treflan	1.5 pt/a	52.7	53.7	58.7	56.7	61.7	63.0	61.3	65.7
2	Treflan Sanda	1.5 pt/a 0.75 oz/a	42.3	43.0	45.3	38.7	43.7	36.3	37.7	47.7
3	Treflan Sanda NIS	1.5 pt/a 0.75 oz/a 0.25 % v/v	57.7	52.3	51.3	54.3	51.7	49.0	50.7	49.0
4	Treflan Cotton-Pro	1.5 pt/a 1.5 pt/a	58.3	64.0	64.3	63.7	62.7	62.3	68.3	65.0
5	Treflan Cotton-Pro NIS	1.5 pt/a 1.5 pt/a 0.25 % v/v	63.3	64.3	69.7	64.7	56.0	56.0	56.0	58.0
6	Treflan Meturon	1.5 pt/a 1 qt/a	14.7	24.7	24.7	9.7	0.0	0.0	0.0	0.0
7	Treflan Staple	1.5 pt/a 0.8 oz/a	55.0	53.7	54.3	46.0	50.3	47.3	52.3	40.7
8	Treflan Valor NIS	1.5 pt/a 1.5 oz/a 0.25 % v/v	46.7	51.7	54.0	60.7	51.3	51.3	53.0	45.7
9	Treflan Staple NIS	1.5 pt/a 1.0 oz/a 0.25 % v/v	39.7	44.0	49.7	54.0	52.7	44.3	37.7	41.0
10	Weed free check		57.3	65.7	71.0	67.0	63.3	64.3	71.7	72.3
LSD (P=.05)			18.46	19.98	17.62	16.01	12.66	14.10	15.85	12.79
Standard Deviation			10.76	11.65	10.27	9.33	7.38	8.22	9.24	7.46
CV			22.07	22.52	18.92	18.11	14.96	17.34	18.91	15.38
Bartlett's X2			5.754	12.165	12.84	8.806	3.916	3.971	16.27	9.643
P(Bartlett's X2)			0.764	0.204	0.17	0.455	0.865	0.86	0.039*	0.291

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code			AVERAGE							
Crop Code			ABMES	ABMES	ABMES	ABMES	ABMES	ABMES	ABMES	
Rating Data Type			Height	Height	Height	fruit	weight	fruit	weight	
Rating Unit			CM	CM	CM	#/plot	gram/plo	#/plot	gram/plo	
Rating Date			Jul-28-03	Jul-28-03	Jul-28-03	Aug-05-03	Aug-05-03	Aug-08-03	Aug-08-03	
Trt-Eval Interval			382 DA-B	382 DA-B	382 DA-B	390 DA-B	390 DA-B	393 DA-B	393 DA-B	
ARM Action Codes					T7					
Trt No.	Treatment Name	Rate	26	27	28	30	31	32	33	34
1	Treflan	1.5 pt/a	55.7	59.3	58.8	12.7	123.7	7.3	63.7	11.7
2	Treflan Sanda	1.5 pt/a 0.75 oz/a	43.7	33.0	41.1	2.3	32.3	1.3	14.0	1.0
3	Treflan Sanda NIS	1.5 pt/a 0.75 oz/a 0.25 % v/v	52.3	51.7	52.0	1.0	7.3	2.3	48.3	7.7
4	Treflan Cotton-Pro	1.5 pt/a 1.5 pt/a	65.0	66.0	64.0	15.3	226.3	9.7	77.7	9.3
5	Treflan Cotton-Pro NIS	1.5 pt/a 1.5 pt/a 0.25 % v/v	61.3	61.0	61.0	12.7	174.7	20.3	184.0	13.3
6	Treflan Meturon	1.5 pt/a 1 qt/a	0.0	0.0	7.4	0.3	7.3	0.0	0.0	0.0
7	Treflan Staple	1.5 pt/a 0.8 oz/a	35.0	37.0	47.2	3.3	38.3	1.7	11.7	0.7
8	Treflan Valor NIS	1.5 pt/a 1.5 oz/a 0.25 % v/v	49.7	48.0	51.2	6.3	89.7	9.3	141.3	5.3
9	Treflan Staple NIS	1.5 pt/a 1.0 oz/a 0.25 % v/v	37.7	46.3	44.7	3.0	11.3	10.3	81.3	6.7
10	Weed free check		72.3	75.0	68.0	11.3	303.3	14.3	147.7	12.0
LSD (P=.05)			20.41	13.64	10.64	6.31	159.88	8.12	77.42	7.22
Standard Deviation			11.90	7.95	6.20	3.68	93.20	4.73	45.13	4.21
CV			25.17	16.66	12.52	53.84	91.88	61.76	58.64	62.17
Bartlett's X2			7.851	4.865	7.778	12.613	29.883	23.622	15.476	13.871
P(Bartlett's X2)			0.448	0.772	0.557	0.181	0.001*	0.003*	0.051	0.085

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Column 27: T7 = @AVG([18].[27])

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Weed Code			ABMES weight gram/plo	ABMES fruit #/plot	ABMES weight gram/plo	ABMES fruit #/plot	ABMES weight gram/plo	ABMES fruit #/plot	ABMES weight gram/plo	ABMES fruit #/plot	
Crop Code			Aug-11-03	Aug-14-03	Aug-14-03	Aug-19-03	Aug-19-03	Aug-22-03	Aug-22-03	Aug-26-03	
Rating Data Type			396 DA-B	399 DA-B	399 DA-B	404 DA-B	404 DA-B	407 DA-B	407 DA-B	411 DA-B	
Rating Unit											
Rating Date											
Trt-Eval Interval											
ARM Action Codes											
Trt No.	Treatment Name	Rate	Unit								
				35	36	37	38	39	40	41	42
1	Treflan	1.5	pt/a	105.0	9.3	107.3	28.0	477.3	20.0	192.0	33.3
2	Treflan	1.5	pt/a	17.7	0.0	0.0	2.3	80.7	6.3	42.7	20.7
	Sandea	0.75	oz/a								
3	Treflan	1.5	pt/a	66.0	9.7	74.0	16.0	236.0	15.7	120.0	24.7
	Sandea	0.75	oz/a								
	NIS	0.25	% v/v								
4	Treflan	1.5	pt/a	106.0	16.0	185.3	30.0	360.7	20.3	198.3	43.7
	Cotton-Pro	1.5	pt/a								
5	Treflan	1.5	pt/a	154.3	10.3	108.7	27.0	400.0	35.0	382.0	30.7
	Cotton-Pro	1.5	pt/a								
	NIS	0.25	% v/v								
6	Treflan	1.5	pt/a	0.0	0.0	0.0	0.7	7.0	2.3	27.0	2.7
	Meturon	1	qt/a								
7	Treflan	1.5	pt/a	8.0	0.7	14.3	4.7	54.7	10.3	81.7	24.7
	Staple	0.8	oz/a								
8	Treflan	1.5	pt/a	53.0	5.7	67.0	28.7	445.7	20.0	204.3	27.3
	Valor	1.5	oz/a								
	NIS	0.25	% v/v								
9	Treflan	1.5	pt/a	95.7	2.3	54.7	19.7	169.7	18.7	185.0	40.3
	Staple	1.0	oz/a								
	NIS	0.25	% v/v								
10	Weed free check			93.3	18.7	175.0	35.7	404.7	16.0	197.7	42.7
	LSD (P=.05)			91.90	5.20	52.94	12.58	211.74	6.33	83.81	12.17
	Standard Deviation			53.57	3.03	30.86	7.34	123.43	3.69	48.86	7.10
	CV			76.64	41.72	39.25	38.08	46.82	22.41	29.96	24.41
	Bartlett's X2			13.083	11.197	6.271	27.451	17.938	10.706	20.66	20.903
	P(Bartlett's X2)			0.109	0.082	0.508	0.001*	0.036*	0.296	0.014*	0.013*

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code			ABMES	ABMES	ABMES	ABMES	ABMES	ABMES	ABMES	ABMES	
Crop Code			weight	fruit	weight	fruit	weight	fruit	weight	fruit	
Rating Data Type			gram/plo	#/plot	gram/plo	#/plot	gram/plo	#/plot	gram/plo	#/plot	
Rating Unit			Aug-26-03	Aug-29-03	Aug-29-03	Sep-02-03	Sep-02-03	Sep-04-03	Sep-04-03	Sep-09-03	
Rating Date			411 DA-B	414 DA-B	414 DA-B	418 DA-B	418 DA-B	420 DA-B	420 DA-B	425 DA-B	
Trt-Eval Interval											
ARM Action Codes											
Trt No.	Treatment Name	Rate	Unit								
1	Treflan	1.5	pt/a	461.3	21.7	232.3	85.0	995.7	69.0	509.0	48.3
2	Treflan Sanda	1.5 0.75	pt/a oz/a	186.0	24.3	166.7	52.3	496.0	40.3	265.7	40.7
3	Treflan Sanda NIS	1.5 0.75 0.25	pt/a oz/a % v/v	311.7	17.0	156.7	61.0	627.3	52.0	502.3	50.3
4	Treflan Cotton-Pro	1.5 1.5	pt/a pt/a	529.0	34.0	334.0	82.3	957.3	61.7	507.0	48.0
5	Treflan Cotton-Pro NIS	1.5 1.5 0.25	pt/a pt/a % v/v	353.7	47.0	418.7	69.0	592.0	72.3	657.0	36.7
6	Treflan Meturon	1.5 1	pt/a qt/a	39.0	0.0	0.0	11.3	172.0	9.3	61.7	9.3
7	Treflan Staple	1.5 0.8	pt/a oz/a	237.0	29.0	253.3	69.0	648.3	65.7	399.0	32.0
8	Treflan Valor NIS	1.5 1.5 0.25	pt/a oz/a % v/v	283.3	21.7	205.7	85.3	1033.7	57.3	538.0	45.0
9	Treflan Staple NIS	1.5 1.0 0.25	pt/a oz/a % v/v	441.0	27.0	175.3	60.7	664.3	51.0	444.3	38.7
10	Weed free check			730.3	23.0	133.0	64.0	548.7	68.3	542.3	60.3
	LSD (P=.05)			196.21	22.53	203.63	26.30	363.99	24.75	288.29	18.33
	Standard Deviation			114.38	13.13	118.70	15.33	212.18	14.43	168.05	10.68
	CV			32.02	53.67	57.19	23.95	31.5	26.37	37.97	26.1
	Bartlett's X2			11.372	11.995	9.258	7.917	10.342	14.096	16.343	11.272
	P(Bartlett's X2)			0.251	0.151	0.321	0.543	0.324	0.119	0.06	0.258

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code				total	total			
Crop Code		ABMES	ABMES	AMBES	AMBES			
Rating Data Type		weight	fruit	weight	weight			
Rating Unit		gram/plo	#/plot	gram/plo	gram/plo			
Rating Date		Sep-09-03	Sep-12-03	Sep-12-03	Jan-03-04			
Trt-Eval Interval		425 DA-B	428 DA-B	428 DA-B	541 DA-B			
ARM Action Codes				T3	T4			
Trt No.	Treatment Name	Rate	Unit	51	52	53	54	55
1	Treflan	1.5	pt/a	442.7	52.0	516.3	398.3	5222.0
2	Treflan Sanda	1.5 0.75	pt/a oz/a	313.0	54.7	363.7	246.3	2474.3
3	Treflan Sanda NIS	1.5 0.75 0.25	pt/a oz/a % v/v	410.7	48.7	434.0	306.0	3621.7
4	Treflan Cotton-Pro	1.5 1.5	pt/a pt/a	420.7	62.3	516.7	432.7	5376.3
5	Treflan Cotton-Pro NIS	1.5 1.5 0.25	pt/a pt/a % v/v	300.7	72.0	628.7	446.3	4946.3
6	Treflan Meturon	1.5 1	pt/a qt/a	133.0	14.7	130.3	50.7	749.3
7	Treflan Staple	1.5 0.8	pt/a oz/a	318.0	45.0	374.7	286.7	3087.3
8	Treflan Valor NIS	1.5 1.5 0.25	pt/a oz/a % v/v	286.0	46.3	330.7	358.3	4712.0
9	Treflan Staple NIS	1.5 1.0 0.25	pt/a oz/a % v/v	401.3	44.0	372.0	322.3	3760.3
10	Weed free check			423.3	66.7	464.0	433.0	4712.0
	LSD (P=.05)			134.41	31.02	257.53	74.02	829.19
	Standard Deviation			78.35	18.08	150.12	43.15	483.37
	CV			22.71	35.71	36.34	13.15	12.5
	Bartlett's X2			4.028	9.381	15.94	13.489	2.908
	P(Bartlett's X2)			0.91	0.403	0.068	0.142	0.968

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Column 52: T3 = [C30]+[C32]+[C34]+[C36]+[C38]+[C40]+[C42]+[C44]+[C46]+[C48]+[C50]+[C52]

Column 53: T4 =

[C31]+[C33]+[C35]+[C37]+[C39]+[C41]+[C43]+[C45]+[C47]+[C47]+[C49]+[C51]+[C53]

Trial Comments

OBJECTIVE: Evaluate okra tolerance to several cotton herbicides applied PRE, POST, or directed.

VISUAL INJURY:

1. Treflan PPI stunted cotton less than 3 to 8% throughout the season.
2. Sandea PRE following treflan PPI stunted okra 22 to 67% throughout the season with the greatest stunting occurring 3 WAT. At harvest okra was still stunted 27%.
3. Directing Sandea to Okra following Treflan PPI caused 15 to 21% chlorosis. At harvest, okra had visually recovered.
4. Injury from Cotton Pro PRE following Treflan PPI was no more than Treflan PPI alone.
5. Directing Cotton Pro did cause okra chlorosis although injury was no more than Treflan PPI alone statistically. Chlorosis disappeared quickly.
5. Apply Cotoran PRE caused severe injury.
6. Staple applied PRE stunted okra growth 52% at 31 DAT. Stunting was still detectable at harvest (11%) but had recovered a great deal.
7. Valor directed with flat fan nozzles caused 29% stem necrosis. Stand loss was minimal but stem necrosis was present for the rest of the season.
8. Staple applied topically stunted okra growth 19 to 24%. Okra stunting was detectable during harvest.

OKRA HEIGHTS (averaged over 20 plants):

1. At 31 days after the at plant applications, Treflan PPI reduced plant growth 18% compared to the weed free. Following Treflan PPI, Staple, Sandea, or Meturon PRE reduced okra growth 50%, 91%, and 55% compared to the weed free.
2. At 14 days after layby, all treatments except Treflan PPI, Treflan fb Cotton Pro PRE, and Treflan fb Cotton Pro directed reduced plant height compared to the weed free.

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OKRA YIELDS (12 Harvest dates):

1. Harvest 1: Treflan, Cotton Pro PRE, and Cotton Pro directed did not affect number or weight of fruit compared to the weed free control.
2. Harvest 2: Treflan, Cotton Pro PRE, and Cotton Pro or Valor directed did not affect number or weight of fruit compared to the weed free control.
3. Harvest 3: Treflan, Cotton Pro or Sandea Pre, Cotton Pro, Valor, Sandea directed or Staple POST did not affect number or weight of fruit compared to weed free.
4. Harvest 4: Cotton Pro did not affect number or weight of fruit compared to the weed free control.
5. Harvest 5: Treflan, Cotton Pro PRE, and Cotton Pro or Valor directed did not affect number or weight of fruit compared to the weed free control.
6. Harvest 6; Treflan, Cotton Pro PRE, and Cotton Pro or Valor directed and Staple POT did not affect number or weight of fruit compared to the weed free control.
7. Harvest 7: No treated plot produced the grams of weight equal to the weed free control.
8. Harvest 8, 9, 10: All treated plots produced wt and number of fruit equal to weed the free except Meturon PRE.
9. Harvest 11. All treated plots except Meturon or Staple PRE and Valor directed produced yields similar to weedfree.
10. Harvest 12: Yields from all treatments were similar.
11. Total Yield: Treflan, Cotton Pro PRE, and Cotton Pro directed did not affect number or weight of fruit compared to the weed free control.

GENERAL COMMENTS:

1. Trial was maintained weed free.

CONCLUSIONS:

- 1) Rate of Treflan should be between 0.75 and 1 pt/A.
- 2) Okra is tolerant to Cotton Pro PRE.
- 3) Okra chlorosis will be noted when directed Cotton Pro to Okrabut injury appears to be transient.